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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,684	03/11/2005	Guillaume De Dinechin	266817US6PCT	7311
22850	7590	04/21/2006		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
EDMONDSON, LYNNE RENEE				
ART UNIT		PAPER NUMBER		
1725				

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,684

Applicant(s)

DE DINECHIN ET AL.

Examiner

Lynne Edmondson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-16 is/are pending in the application.
- 4a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/30/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of a molten bath as part of the installation. A molten pool is disclosed but this is typically a small area of molten material on the workpiece. In the art, a molten bath is typically molten material inside of a container

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear whether applicant is making reference to the molten pool formed on the workpiece or a molten bath which is typically a separate container in the art.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 6, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Obana et al. (USPN 6555779 B1).

Obana teaches an installation (501) for laser welding comprising a laser (504), a filler wire guide (514), a head with multiple drillings (openings) passing through the head converging toward each other, two gas ejection pipes (519,520) and means for adjusting the position of the head (536) (figure 5 and col 15 line 50 – col 16 line 22).

7. Claims 6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Minamida et al. (US 2003/0038120 A1, IDS).

Minamida teaches an installation for laser welding comprising a laser, a filler wire guide (35), a head with multiple drillings (openings) passing through the head converging toward each other, two gas ejection pipes (21,27) and means for adjusting the position of the head (figure 10 and paragraphs 86-88).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obana et al. (USPN 6555779 B1) in view of Tomassini et al. (USPN 4475788).

Obana teaches an installation (501) for laser welding comprising a laser (504), a filler wire guide, a head with multiple drillings (openings) passing through the head converging toward each other, two gas ejection pipes (519,520) and means for adjusting the position of the head (536) (figure 5 and col 15 line 50 – col 16 line 22). However the means for adjusting the position of the head is not further disclosed.

Tomassini teaches a method of moving a laser device with a micrometric table (figure 2 and col 1 line 62 – col 2 line 5 and col 2 lines 22-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use a micrometric table to move the tool in a careful yet precise manner.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obana et al. (USPN 6555779 B1) in view of Lefebvre et al. (USPN 6608285 B2).

Obana teaches an installation (501) for laser welding comprising a laser (504), a filler wire guide, a head with multiple drillings (openings) passing through the head.

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converging toward each other, two gas ejection pipes (519,520) and means for adjusting the position of the head (536) (figure 5 and col 15 line 50 – col 16 line 22).

However the welding means are not further disclosed.

Lefebvre teaches an installation for welding with a CO2 or YAG laser sources and a MIG, TIG or MAG arc welder (col 1 lines 21-40, col 3 lines 9-20 and col 4 line 19).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use conventional lasers such as CO2 and YAG and to use known arc welding means such as MIG and MAG to produce consistent, reliable welds (Obana, col 23 line 60 – col 24 line 4).

Response to Arguments

11. Regarding applicant's argument that Obana does not teach a wire guide electrode and a laser but rather teaches them as alternatives, see figure 5 and column 15 line 50 – column 16 line 23 which teaches a wire guide electrode 514 and a laser 504:

12. Therefore the 102 rejection of claims 6, 8 and 9 as anticipated by Obana stands. The 103 rejection of claim 7 as obvious over Obana in view of Tomassini et al. (USPN 4475788) and the 103 rejection of claim 10 as obvious over Obana in view of Lefebvre also stand.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Beyer et al. (USPN 5821493, bondhead not shown), Hashimoto et al. (USPN 6034343), Takikawa et al. (US 2004/0000539 A1), Sonoda et al. (US 2004/0232130 A1), Dykhno et al. (US PN 6388227 B1) and Walduck (USPN 5866870).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson
Primary Examiner
Art Unit 1725

ULS 4/19/06

LRE